

BRIDGE REHABILITATION CONSISTS OF

3 - 64'-0" SPANS, BRIDGE DECK REPLACEMENT	SPECIAL DESIGN
4 - END POST AND GUARDRAIL ATTACHMENT DETAIL (L = 4'-0"; W = 1'-1"; H = 2'-8") (L = 5'-0"; W = 1'-1"; H = 2'-8")	GA. STD. 3054 (5-89)
BAR BENDING DETAILS	GA. STD. 3901 (8-69)
"W" BEAM GUARDRAIL	GA. STD. 4010 (7-97)
POST AND OFFSET BLOCKS FOR "W" & "T" BEAM GUARDRAIL	GA. STD. 4011A (3-99)
GUARDRAIL CONNECTION AT BRIDGE END	GA. STD. 4012C (4-89)
GUARDRAIL ANCHORAGE TYPE 1	GA. STD. 4012D (11-99)
GUARDRAIL ANCHORAGE TYPE 12	GA. STD. 4040 (7-97)
GUARDRAIL LOCATION DETAILS FOR UNDIVIDED HIGHWAYS AND ROADS	GA. STD. 4052 (10-97)
STANDARD "T" BEAM GUARDRAIL	GA. STD. 4270 (3-89)
CONCRETE SPILLWAYS	GA. STD. 9017J (4-89)
REINFORCED CONCRETE APPROACH SLAB W/ASPHALT INLAY (NEW STANDARD)	GA. STD. 9017R (8-99)
ISOMETRIC VIEWS OF SIDE ROAD OR DRIVE FLARE DETAIL AT BRIDGE ENDS	GA. STD. 9031T (8-95)
CONSTRUCTION DETAILS:	
TEMP. SILT FENCE, BALED STRAW EROSION CHECK, BRUSH BARRIERS	D-24A (2-01)
UNIFORM CODE SYSTEM FOR SOIL EROSION AND SEDIMENT CONTROL	D-37C (3-98)
SUBBASES FOR APPROACH SLABS	M-2 (6-88)

SUMMARY OF QUANTITIES

PAY ITEM NUMBER	QUANTITY	UNIT	PAY ITEM
150-1000	LUMP	LS	TRAFFIC CONTROL, STP-M001-00(430)
165-0030	720	LF	MAINTENANCE OF TEMPORARY SILT FENCE, TP C
171-0030	1440	LF	TEMPORARY SILT FENCE, TYPE C
310-5100	82	SY	GR AGGR BASE CRS, 10 INCH, INCL MATL.
402-1812	772	TN	RECYCLED ASPH CONC LEVELING, INCL BITUM MATL & H LIME
402-3121	21	TN	RECYCLED ASPH CONC 25 地地 SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME
402-3130	88	TN	RECYCLED ASPH CONC 12.5 地地 SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME
402-3190	31	TN	RECYCLED ASPH CONC 19 地地 SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME
432-5010	772	SY	MILL ASPH CONC PVMT, VARIABLE DEPTH
433-2030	219	SY	REINF CONC APPROACH SLAB, INCL SLOPED EDGE & SUBBASE
441-0301	1	EA	CONC SPILLWAY, TP 1
441-0302	1	EA	CONC SPILLWAY, TP 2
449-1620	40	LF	LOW-DENSITY, CLOSED-CELL, X-LINKED, ETHYLENE VINYL ACETATE, POLYETHYLENE COPOLYMER, NITROGEN-BLOWN SEAL, BR NO - 1, BENT NO 1
449-1620	37	LF	LOW-DENSITY, CLOSED-CELL, X-LINKED, ETHYLENE VINYL ACETATE, POLYETHYLENE COPOLYMER, NITROGEN-BLOWN SEAL, BR NO - 1, BENT NO 2
449-1620	37	LF	LOW-DENSITY, CLOSED-CELL, X-LINKED, ETHYLENE VINYL ACETATE, POLYETHYLENE COPOLYMER, NITROGEN-BLOWN SEAL, BR NO - 1, BENT NO 3
449-1620	37	LF	LOW-DENSITY, CLOSED-CELL, X-LINKED, ETHYLENE VINYL ACETATE, POLYETHYLENE COPOLYMER, NITROGEN-BLOWN SEAL, BR NO - 1, BENT NO 4
500-0100	604	SY	GROOVED CONCRETE
500-1006	LUMP	LS	SUPERSTR CONCRETE, CL AA, BR NO - 1 (190)
500-2100	371	LF	CONCRETE BARRIER
511-3000	LUMP	LS	SUPERSTR REINF STEEL, BR NO - 1 (54380)
540-1202	LUMP	LS	REMOVAL OF PARTS OF EXISTING BRIDGE, BR NO - 1
576-1015	140	LF	SLOPE DRAIN PIPE, 15 IN
603-2024	525	SY	STN DUMPED RIP RAP, TP 1, 24 IN
603-7000	525	SY	PLASTIC FILTER FABRIC
632-0003	5	EA	VARIABLE MESSAGE SIGN, PORTABLE, TYPE 3
641-1100	83	LF	GUARDRAIL, TP T
641-1200	525	LF	GUARDRAIL, TP W
641-5001	2	EA	GUARDRAIL ANCHORAGE, TYPE 1
641-5012	2	EA	GUARDRAIL ANCHORAGE, TYPE 12
652-5451	1000	LF	SOLID TRAFFIC STRIPE, 5IN, WHITE
652-5452	1000	LF	SOLID TRAFFIC STRIPE, 5IN, YELLOW

GENERAL NOTES

SPECIFICATIONS - GEORGIA STANDARD SPECIFICATIONS, 1993 EDITION, AND 1997 SUPPLEMENTAL SPECIFICATIONS AS MODIFIED BY CONTRACT DOCUMENTS.

REINFORCING STEEL - ALL REINFORCING STEEL SHALL BE PLACED AND TIED IN ACCORDANCE WITH THE GEORGIA DOT SPECIFICATIONS. WELDING OF REINFORCING STEEL WILL NOT BE PERMITTED.

CHAMFER - ALL EXPOSED CONCRETE EDGES SHALL BE CHAMFERED ¾ INCH UNLESS OTHERWISE NOTED.

TRAFFIC CONTROLS - ROAD SHALL BE CLOSED DURING BRIDGE CONSTRUCTION. SEE DETOUR PLAN.

EXISTING BRIDGE PLANS - PLANS FOR EXISTING BRIDGE MAY BE PURCHASED BY CONTACTING THE PLANS REPRODUCTION OFFICE AT (404) 656-5401. THE EXISTING BRIDGE WAS BUILT UNDER PROJECT NUMBER R.A.B. (4) S.P. 1937-A(5) SEC. 3.

DIMENSIONS AND ELEVATIONS - ALL DIMENSIONS AND ELEVATIONS SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO ORDERING MATERIALS OR BUILDING FORMS. LIGHT LINES INDICATE THE EXISTING STRUCTURE AND HEAVY LINES INDICATE THE NEW STRUCTURE.

EPOXY RESIN ADHESIVE - EPOXY RESIN ADHESIVE TYPE II SHALL BE APPLIED TO ALL HARDENED CONCRETE SURFACES JUST PRIOR TO POURING THE CONCRETE FOR THE NEXT STAGE OF CONSTRUCTION, SEE SECTION 886 OF THE GEORGIA DOT SPECIFICATIONS. COST OF EPOXY ADHESIVE AND ITS APPLICATION SHALL BE INCLUDED IN THE OVERALL BID SUBMITTED.

EXISTING REINFORCEMENT - EXISTING REINFORCEMENT TO BE UTILIZED IN NEW CONSTRUCTION SHALL BE BENT IN A MANNER TO PROVIDE THE MAXIMUM LAP POSSIBLE OR AS SHOWN ON THE PLANS. EXISTING REINFORCEMENT SHALL BE THOROUGHLY CLEANED OF CONCRETE SCALE AND RUST BEFORE BONDING INTO BEFORE BONDING INTO NEW CONSTRUCTION.

EXISTING ANCHOR BOLTS - REPLACE THE BENT ANCHOR BOLT AT THE FOLLOWING LOCATION:
BENT 3 - BEAM 1
BOLT SHALL BE REMOVED AND REPLACED WITH A NEW 1" DIA. SWEDGED ANCHOR, 1'-8" LONG, WITH HEX NUTS AND ¾" X 3½" WASHERS, CLEAN HOLES THOROUGHLY AND USE HILTI HSE 2411 EPOXY ADHESIVE ANCHORING SYSTEM, OR APPROVED EQUAL, TO ANCHOR THE BOLTS IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION. NUTS WASHERS AND BOLTS SHALL BE ASTM A-276 TYPE 304. COST SHALL BE INCLUDED IN THE OVERALL BID SUBMITTED.

UTILITY HANGERS - INSERTS SHALL BE FURNISHED AND INSTALLED BY CONTRACTOR. INSERTS SHALL BE GRINNELL FIGURE 282 OR APPROVED EQUAL. COST OF FURNISHING AND INSTALLING INSERTS SHALL BE INCLUDED IN OVERALL BID SUBMITTED. ALL OTHER COMPONENTS OF HANGER ASSEMBLIES SHALL BE FURNISHED AND INSTALLED BY UTILITY OWNER.

PROTECTIVE SURFACE TREATMENT - PROTECTIVE SURFACE TREATMENT WILL BE REQUIRED AT THIS SITE AS PER SUB-SECTION 500.13.C OF THE GEORGIA DOT SPECIFICATIONS.

GROOVED CONCRETE - THE ENTIRE LENGTH OF THE BRIDGE SHALL BE GROOVED TRANSVERSELY AS PER SUB-SECTION 500.11.C.6.C.(2) OF THE GEORGIA DOT SPECIFICATIONS.

WELDING - ALL WELDING ON GEORGIA DOT PROJECTS SHALL BE PERFORMED BY CERTIFIED WELDERS THAT HAVE IN THEIR POSSESSION A CURRENT WELDING CERTIFICATION CARD ISSUED BY THE GEORGIA DOT OFFICE OF MATERIALS AND RESEARCH. ONLY E70XX (EXCLUDING E7014 AND E7024) LOW HYDROGEN ELECTRODES SHALL BE USED FOR MANUAL SHIELDED METAL ARC WELDING.

SALVAGE MATERIAL - NO MATERIAL REMOVED FROM THE EXISTING STRUCTURE SHALL BE SALVAGED FOR USE BY THE GEORGIA DEPARTMENT OF TRANSPORTATION.

INCIDENTAL ITEMS - COST INCIDENTAL TO THE WORK THAT IS NOT SPECIFICALLY COVERED BY THE GEORGIA STANDARD SPECIFICATIONS, SUPPLEMENTAL SPECIFICATIONS AND/OR SPECIAL PROVISIONS SHALL BE INCLUDED IN THE OVERALL BID SUBMITTED. THIS INCLUDES THE COST OF CLEANING AND BENDING OF EXISTING REINFORCEMENT, JOINT FILLERS, AND OTHER INCIDENTAL ITEMS NECESSARY TO COMPLETE THE WORK.

NOI - NOI IS NOT REQUIRED ON THE PROJECT.

REMOVAL OF PARTS OF THE EXISTING BRIDGE - THE REMOVAL OF PARTS OF THE EXISTING BRIDGES SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 540 - REMOVAL OF EXISTING BRIDGE. DISPOSAL SITES SHALL BE SUBMITTED AND APPROVED BY THE ENGINEER PRIOR TO ANY WORK ON THIS ITEM. COSTS OF THE REMOVAL OF THE EXISTING BRIDGE DECK, SIDEWALK, HANDRAILS, APPROACH SLABS & PAVEMENT, SPILLWAYS & GUARDRAILS SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 540-1202, REMOVAL OF PARTS OF EXISTING BRIDGE.

REDRESS END ROLLS - BRIDGE END ROLLS SHALL BE REDRESSED UNDER THE END BENTS TO CORRECT EROSION & SETTLEMENT AS DIRECTED BY THE ENGINEER. COST SHALL BE INCLUDED IN PRICE BID FOR PAY ITEM 603-2024, STN DUMPED RIP RAP.

STANDARD PLAN MODIFICATION - THE APPROACH SLAB STANDARD SHALL BE MODIFIED TO INCREASE THE ¾ INCH EXPANSION JOINT SHOWN BETWEEN THE APPROACH SLAB AND THE BACK FACE PAVING REST TO 1 INCH. SEE MISCELLANEOUS DETAILS SHEET FOR EXPANSION JOINT DETAILS.

PAINTING - ANY DAMAGE TO THE PAINT OF THE BEAMS DURING REMOVAL AND/OR REPLACING OF ENDWALLS / EDGE BEAMS SHALL BE REPAIRED USING SYSTEM VI PAINT SYSTEM. ALL PAINTING SHALL BE IN ACCORDANCE WITH SECTION 535 OF THE GEORGIA DOT SPECIFICATIONS. THE COST OF PAINTING SHALL BE INCLUDED IN THE OVERALL BID SUBMITTED.

DESIGN DATA

SPECIFICATIONS ----- AASHTO 1996 AND 1997, 1998 AND 1999 INTERIMS (DESIGNED FOR SEISMIC PERFORMANCE CATEGORY A)

TYPICAL HS15-44 ----- IMPACT ALLOWED

FUTURE PAVING ALLOWANCE ----- 15 LBS PER SQ FT

CONCRETE: SUPERSTRUCTURE ----- CLASS AA, f_c = 5,000 PSI
CONCRETE BARRIER ----- CLASS AA, f_c = 3,500 PSI

REINFORCEMENT STEEL: ----- GRADE 60, f_y = 60,000 PSI

CONSTRUCTION SEQUENCE

1. ESTABLISH ROAD / BRIDGE CLOSURE AS SHOWN ON DETOUR PLAN.
2. REMOVE & REPLACE PARTS OF EXISTING BRIDGE ACCORDING TO PLANS.
3. REMOVE & RECONSTRUCT ROADWAY ITEMS ACCORDING TO PLANS.
4. REMOVE TRAFFIC CONTROL MEASURES & OPEN COMPLETED BRIDGE TO TRAFFIC.

EXISTING UTILITIES

GAS MAIN----- ATLANTA GAS LIGHT COMPANY

TELEPHONE ----- ALLTEL GEORGIA, INC.

TRAFFIC DATA

TRAFFIC ----- ADT = 7400 (2000)
ADT = 11100 (2020)

DESIGN SPEED ----- 55 MPH

TRUCKS ----- 10%

BRIDGE NO. 1



Heath & Lineback Engineers
INCORPORATED
12 POWDER SPRINGS STREET, SUITE 240
MARIETTA, GEORGIA 30064

GEORGIA
DEPARTMENT OF TRANSPORTATION
OPERATIONS DIVISION - OFFICE OF MAINTENANCE

GENERAL NOTES
S.R. 211 OVER DUNCAN CREEK
DECK REPLACEMENT
BARROW COUNTY STP-M001-00(430)

SCALE: NO SCALE MAY 2002

BRIDGE SHEET
6 OF 10

DATE	BY	REVISIONS

DESIGNED BJ	CHECKED JC	REVIEWED
DRAWN DR	DESIGN GROUP	APPROVED